

PIGEON CONTROL METHOD

This application claims the benefit of U.S. Provisional Application Number 60/397,770 filed 07/23/2002.

FIELD OF THE INVENTION

This invention relates to the field of pest control, and more particularly to discouraging or preventing of the roosting or nesting of birds on structures.

BACKGROUND OF THE INVENTION

In many urbanized areas, larger numbers of birds tend to roost on structures, thereby creating an annoyance, visual defacement from droppings, and the spread of disease. Crows, sparrows, starlings and especially pigeons are primary culprits. For environmental, aesthetic and humanitarian reasons, use of poisons or other methods to kill birds is undesirable. Trapping and relocating the birds is expensive and labor-intensive, and is often a losing battle as local flocks grow in number. Consequently, efforts have been directed toward passive devices that discourage roosting.

Many types of roosting deterrents have been tried, with varying levels of success. One approach is to attach a base strip with projecting spikes to the structure's horizontal surfaces such as cornices, decorative walls, or overhangs. The spikes may be vertical or angled, and have a variety of shapes, with the objective of poking the birds or leaving the birds insufficient space to perch or roost on the surface. While sometimes effective, these devices may be unsightly, looking like dozens of antennae sticking up everywhere on the structure. They are also not suited to broad horizontal surfaces because the visual effect would be a forest of spikes. In addition, birds often anchor nesting material in these devices.

Another approach has been to string one or more wires a few inches above surfaces where birds might roost, leaving insufficient room for the birds to stand. Effectiveness is limited to narrow surfaces and the devices are not visually attractive; if the birds have no other place to roost, they are capable of standing on the wires. Yet other approaches have included applying sticky substances to surfaces, using magnets, using electrified metal strips and attaching reflective materials or objects that are believed to frighten the birds. All of them have met limited success, with birds generally adapting to the device within a week.

The objective of the present invention is to provide a way to discourage birds, and particularly pigeons, from roosting or nesting on structures in a way that is effective but without detracting from the visual aesthetics of the structure.

SUMMARY OF THE INVENTION

The inventive method comprises the steps of identifying the locations conducive to nesting or roosting and applying a pigeon slide at those locations so that the birds may not comfortably roost, affix twigs for a nest, or deposit eggs in a stable setting.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a depiction of a portion of a residential structure showing locations identifiable as roosting or nesting zones.

Figure 2 is a depiction of the same location after application of the inventive method.

Figure 3 shows a pole with a conical pigeon slide applied.

Figure 4a shows an inverted triangle pigeon slide structure.

Figure 4b is a cross section of the slide structure in Figure 4a.

Figure 5 is a pigeon slide sheet for application over one or more S-shaped roof tiles.

Figure 6 is a pigeon slide sheet for application over a flat roof tile.

Figure 7 is a depiction of the application of the inventive method to apply pigeon slide sheets to a portion of a roof near a chimney.

Figure 8 is a depiction of a pigeon slide sheet used as a bridge over missing tile.

DETAILED DESCRIPTION

Pigeons can be discouraged or prevented from roosting on structures by eliminating horizontal surfaces that allow the birds to stand comfortably. Ledges, overhangs, cornices, beam extensions, projections, dormers, parapets, chimneys, pop-outs and other architectural features, as well as mechanical equipment cabinets and rooftop storage areas are all potential candidates for roosting spots.

Pigeons can be discouraged from building nests by eliminating anchor points to which the birds can attach twigs and waste materials from a stable platform for their eggs. Examples of such anchor points are valleys where roof slopes meet, broken or improperly fit tiles, internal corners, protruding elements (including spikes or nets meant to deter roosting), chimney stops, mechanical equipment stops, or breaks in the run of roofing tiles. Finally, pigeons may lay eggs directly on any protected horizontal flat areas from which eggs will not roll, and such locations must be modified to make them unsuitable.

The inventive method to deal with these problems involves proper application of pigeon slides to the specific structural feature. A pigeon slide is a sheet of material having a slick outer surface and mounted at an angle so that a pigeon slides downward under the force of gravity and cannot stand still on the surface without effort. The pigeon slide may be constructed of any material strong enough to bear the weight of a pigeon and durable enough to stand up to the local environmental conditions. In certain applications described below, the sheet should be flexible enough to follow the contour of the structure, while in other applications rigidity is desirable.

Appropriate materials of pigeon slide sheeting include aluminum, sheet metal, treated wood, plastic, glass, fiberglass, tile or composites. The outer surface may be powder coating, non-stick paint, a fluoropolymer such as that is sold under the brand name "Teflon," polished metal, a weatherproof oiled composite, or any other composition that produces a slick surface. If desired, the pigeon slide may be painted or otherwise colored to match the color of the surface on which it is installed.

The first step in the inventive method is assessing the structure to identify roosting zones, which are potential roosting or perching locations and nesting zones, which are potential nesting or egg-laying locations. For a structure that has been in existence for some time, an observation of the actual presence of roosting or nesting birds, as well as evidence of nesting materials, uric acid staining, fecal droppings or feathers, will help pinpoint nesting and roosting zones. Identification of potential nesting and roosting zones may be accomplished by visual inspection for horizontal surfaces of sufficient size.

The next step is to apply pigeon slides to the roosting zones. Figures 1 and 2 illustrate a portion of a structure treated according to the inventive method. The structure has five roosting or nesting zones, labeled 101 through 105. Each zone is a horizontal surface sufficiently large for a bird to perch. In Figure 2, pigeon slides 111 through 115 have been affixed to the roosting zones. Pigeon slide 111 is shaped as a pyramid; pigeon slide 112 is shaped as a $\frac{3}{4}$ pyramid; pigeon slide 113 is a half-pyramid and pigeon slides 114 and 115 are inverted V shapes similar to Figure 4. When affixed to the structure with a weatherproof adhesive, each slide caps a roosting or nesting zone and transforms it into a slippery, multi-sloped surface on which the birds cannot rest. The size, color and shape of the slide to be applied are selected to eliminate space for roosting and to avoid interfering with the aesthetics of the structure.

While not meant to be limiting, other pigeon slide shapes have been employed in the inventive treatment method. Figure 3 depicts a conical pigeon slide 121, which has been used successfully where the roosting zone is the top of a power pole 122 or communication tower. The shape eliminates the horizontal platform and enhances the visual image of the structure.

Figures 4a and 4b show a form used successfully as a cap on flat tiles. Sides 125 and 126 are of roughly equal length, and the ends 127 and 128 are folded under to provide mounting support; extremities 129 and 130 may optionally be closed. Figure 5 depicts an “S” tile cover for a standard variety of clay roofing tiles. The slides material follows the contours of the roofing tile, making the surface slippery, while the slope of the underlying roof causes an alighted bird to slide downward. This form is often the length of several roofing tiles.

Figure 6 depicts a form of attachment to a standard flat roofing tile. The bend 131 on one end allows adhesive attachment to the exposed end of the tile.

Application of the method to discourage nesting is quite similar. The structure must be surveyed to identify nesting zones. It is generally known that pigeons will build nests in locations where they can anchor the twigs or miscellaneous trash for stability. Horizontal surfaces serving as roosting zones may also be used for nesting if they are over about 4 inches wide. Often a location with a protective overhang is chosen, but sometimes the nest will be built in an exposed trough area, anchored to a broken tile, under peaking tiles or a loose fitting section of a roof valley, or near the flashing on the upslope side of a protruding structure.

Nesting zones on horizontal protrusions around the structure may be treated in a manner similar to roosting zones. A pyramid, triangular or other appropriately-styled pigeon slide may preempt the nesting zone. Figures 1 and 2 illustrate pigeon slides 114 and 115 placed to interfere with roosting zones that are also nesting zones.

For larger nesting zones, pigeon slide sheets are applied to impose a surface that impedes anchoring and causes twigs and nest material to slide away. These sheets would also cause an egg to roll so that a bird that might lay eggs in an available flat location would be deterred. The pigeon slide sheets are affixed to the tiles and other roofing materials, and mounted so as to provide a sloping surface that also covers anchor points. A silicone bead around the periphery of the slide sheet is used so that birds cannot insert anchor twigs between the slide sheet and the underlying tile.

Figure 7 is an example of the sheet embodiment of pigeon slides. In a portion of a multi-sloped roof, the tiles stopped short of the chimney protrusion, leaving a zone of asphalt roof surrounded by tiles, providing many potential anchor points for nesting. Pigeon slide sheets 151, 152, 153, 154 and 155, made of sheet metal with a powder coated slick side, were applied to cover the open area, with the natural slope of the roofline supplying the slant that makes the treated location unsuitable for nesting. Cut tabs 156 are bent downward to inhibit nest anchoring under the slide itself. Beads of silicone 160 are applied at overlaps and where the slide meets the native tile, again to prevent anchoring by slipping twigs underneath the slide material.

Figure 8 shows a small pigeon slide 171 used as a bridge or patch over a gap left in the roof tile system. Silicone bead 172 seals the edge so an anchor point is not available.

Although the present invention has been described with reference to certain preferred versions thereof, other versions are possible. For example, additional multi-angled shapes are useful to cap horizontal surfaces to prevent roosting and nesting. Therefore, the spirit and scope of the appended claims should not be limited to the description of the preferred versions contained herein.